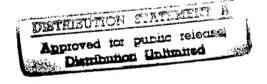
JPRS-CAG-86-034 8 OCTOBER 1986

# China Report

**AGRICULTURE** 





19980227 172



FOREIGN BROADCAST INFORMATION SERVICE

REPRODUCED BY
U.S. DEPARTMENT OF COMMERCE
NATIONAL TECHNICAL
INFORMATION SERVICE
SPRINGFIELD, VA. 22161

3 58 9.04 JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

#### PROCUREMENT OF PUBLICATIONS

JPRS publications may be ordered from the National Technical Information Service, Springfield, Virginia 22161. In ordering, it is recommended that the JPRS number, title, date and author, if applicable, of publication be cited.

Current JPRS publications are announced in <u>Government Reports Announcements</u> issued semi-monthly by the National Technical Information Service, and are listed in the <u>Monthly Catalog of U.S. Government Publications</u> issued by the <u>Superintendent of Documents</u>, U.S. Government Printing Office, Washington, D.C. 20402.

Correspondence pertaining to matters other than procurement may be addressed to Joint Publications Research Service, 1000 North Glebe Road, Arlington, Virginia 22201.

JPRS-CAG-86-034 8 OCTOBER 1986

# CHINA REPORT AGRICULTURE

# CONTENTS

### PEOPLE'S REPUBLIC OF CHINA .

#### NATIONAL

Restructuring of Export Structure Discussed (Bian Jiang; JINGJI RIBAO, 17 May 86)	1
World Bank Loans for Agriculture 'Doing Well' (NONGYE JINGJI XIAOGUO, No 2, 25 Apr 86)	6
RENMIN RIBAO on Farm Product Market Fluctuation (RENMIN RIBAO, 29 Aug 86)	9
\$122 Million Planned for Agricultural Project (CHINA DAILY, 13 Sep 86)	11
Per Capita Savings Surpass 100 Yuan (NONGMIN RIBAO, 14 Jul 86)	12
Official Interviewed on Agricultural Taxes (NONGCUN GONGZUO TONGXUO, No 6, 5 Jun 86)	14
Impact of Reduced Fertilizer Imports Surveyed (Wang Wei; NONGMIN RIBAO, 1 May 86)	18
First Land Development Plan Underway (XINHUA, 14 Sep 86)	21

	Improved Treatment of Agrotechnicians Urged (RENMIN RIBAO, 19 Jul 86)	22
	Briefs Quality Farm Produce Bases Aquatic Products Harvest Students Aid in Underdeveloped Areas Forestry Industry Reform	24 24 24 25
ANHUI		
	Briefs Flood Prevention Watermelon Output	26 26
GUANGX:	I	
	Reclamation District Brought Into Line With State Policy (Liang Zhenzhuo; ZHONGGUO NONGKEN, No 3, 24 Mar 86)	27
HEILONG	GJIANG	
	Development Strategies Outlined (Yu Yintang, Dai Shuxin; NONGYE JISHU JINGJI, No 4, Apr 86)	30
HENAN		
	Vegetable Production Discussed (ZHONGGUO SHANGYE BAO, 25 Mar 86)	38
HUNAN		
	Policy on Fertilizer Prices Implemented (ZHONGGUO SHANGYE BAO, 28 Jun 86)	40
SHAANX	I	
	Agriculture Gets Increased Funds (SHAANXI RIBAO, 16 Jun 86)	42
SICHUA	N .	
	Development of Feed Industry Must Be Speeded Up (SICHUAN RIBAO, 6 Jul 86)	43
XIZANG		
	Grain Production Emphasized (XIZANG RIBAO, 3 Apr 86)	45

# YUNNAN

Techniques for Producing Alternate Livestock Feed Locally (Li Shuqing, Zhou Xuecao; YUNNAN RIBAO, 22 Apr 86)	, 48
Integrating Scientific Research With Production Discussed (YUNNAN RIBAO, 6 Apr 86)	, 50
ZHEJIANG	
Example of New Contract System Working (XINHUA, 30 Aug 86)	. 52
/9987	

#### RESTRUCTURING OF EXPORT STRUCTURE DISCUSSED

Beijing JINGJI RIBAO in Chinese 17 May 86 pp 1, 2

[Article by Bian Jiang [6708 3984]: "A Brief Discussion of the Production System for Agricultural Exports"]

[Text] Foreign Exchange Earned from Agricultural Exports Has an Important Status in National Export Earnings

The 1984 agricultural export total was \$4.1 billion, about 17 percent of the national export total. Total exports of township and town enterprises were \$3.3 billion, about 14 percent of the national export total; combined, the two come to about 31 percent, or nearly one-third of 1984 exports. The 1985 agricultural export total was \$4.7 billion, 19 percent of the national export total. After collective study by the Ministry of Foreign Economic Relations And Trade, The Ministry of Commerce, and the Ministry of Agriculture, Animal Husbandry, and Fishery, it was tentatively planned by 1990 that \$7.5 billion in foreign exchange will be earned from agricultural exports. This is 19 percent of the national foreign exchange total earned from exports, which is an 83-percent increase in absolute value over 1984, and even higher than the 57-percent proportion of the national export increase. Total exports of township and town enterprises might still be about14 percent and combined, the two items will be 33 percent of the national export total. This does not include processed agricultural exports. Processed agricultural exports in 1984 accounted for \$6.7 billion (there is a certain duplication with the foreign exchange earned by township and town enterprises), which is about 26 percent of the national export total. Thus, it can be seen that agriculture occupies an important position in China in the earning of foreign exchange from exports.

Premier Zhao Ziyang pointed out in his explanation of proposals in the formulation of the Seventh 5-Year Plan that a good environment needs to be created for reform; latent strength also needs to be marshalled for subsequent growth; and, the people's lives also need to be improved. There are many contradictions. There are two keys to resolving these contradictions: forcefully raise enterprise efficiency, and energetically strengthen the foreign exchange earning potential of exports. It can thus be seen that strengthening the foreign exchange earning potential of agricultural exports is an imprtant strategic job for China's Ministry of Agriculture, Animal

Husbandry, and Fishery (including township and town enterprises) and the agriculture battle line.

It must be stated here in particular that foreign exchange earnings of township and town enterprise exports are an important component in earning foreign exchange from agricultural exports, they are also of great significance. The broad modernization of agriculture includes not only agriculture, forestry, and livestock, sideline industries and fishing, but also manufacturing, commerce, construction, transportation, and service industries. Township and town enterprises and farm village industrial sideline enterprises already have an important position in the modernization of agriculture and in farm village economics, and have become important economic pillars in economically developed districts. Township and town enterprise growth (certainly, there is also the growth in light textile and food industries) has already, in addition to the still to-be-further-changed situation of primary products and raw materials being the sole agricultural exports, greatly increased processed exports, especially in finely processed commodities, and by so doing greatly strengthened the foreign exchange earning potential of agricultural exports.

Setting Up A Production System for Agricultural Exports is an Important Reform in the Foreign Trade System and is an Important Problem in the Expansion of Agriculture Earning Foreign Exchange

Premier Zhao Ziyang pointed out several times in 1985 that there must be a good grip on establishing an industrial and agricultural export production system. He pointed out that this export production system—practicing a novel system different from that system currently in practice within the country, namely practicing a policy different from enterprises marketing within the country in price, quota system, testing standards, tax collection, and other aspects—make these enterprises and bases which specialize in export services well informed, profitable, energetic in producing exports, and truly create commodities which are superior in quality, low in price, market oriented, and promptly supplied. Only in this way will competitiveness increase and even more commodities be able to break into the international marketplace.

At present, the principle problem in agricultural exports earning foreign exchange is: production and operation of agricultural export commodities is comparatively scattered; scientific research production and processing technology are comparatively backward; commodity quality is low and unstable, and a steady supply of export quantities cannot be guaranteed; facilities for storage, transportation, and so on are uncoordinated; agriculture and trade are separate and production units for agricultural commodity exports lack enthusiasm, and so on. The key to solving these problems lies in reforming the foreign trade system, adjusting foreign trade policies, mobilizing all sides, and, principally, in mobilizing the enthusiasm of production enterprises and producers of agricultural exports. Establishing an agricultural production system to solve existing problems and to strengthen the potential of exports for earnings foreign exchange are completely necessary, and especially pressing.

The agricultural export system is a complete production system that specializes in undertaking or in principally undertaking commodity production from production bases and enterprises with high ratios of export commodities, which have scientific, processing, storage and transportation, sales and other enterprises that serve exports; they can be established principally for large-quantity export commodities, such as the establishment of export systems based on soybean, corn, vegetable oils, fruits, vegetables, and lean pits. Provincial borders can be broken through when forming specialized companies that are national in nature (small-quantity and local-specialty export commodities excepted). They can carry out policies and management methods different from enterprises that market inside the country, clearly stipulate standards, be run by an oversight committee of people who know the business, are public spirited and unselfish, and carry out evaluation. Reevaluation can be repeated once every 3, 5, 10 or 15 years. They can organize an export producer association or specialized export company board of directors from export production bases, from enterprises (including specialized households), and from export-servicing scientific, processing, storage and transport, marketing, and other enterprises. We have currently already set up a group of export production bases, enterprises, specialized households, and state-run farms that have higher technical standards and export commodity rates, and have accumulated some experience. Guangdong Province's Shantou Prefecture, for instance, has set up a group of commercialized agricultural companies, implemented the attracting [of foreign capital] and coordination within the country. Export product bases for processing industries for fruits, vegetables, and sea products are beginning to take shape, and the first step has been taken in forming a complete agricultural export production system where "agricultural trade" is combined with "trade, industry, and agriculture." Their experience is worth drawing upon.

The Principal Thing in Mobilizing Enthusiasm on All Sides for Completing the Job of Earning Foreign Exchange from Exports Is To Mobilize the Enthusiasm of Production Enterprises and Producers To Increase Production of Export Commodities. This Is the Key To Strengthening the Foreign Exchange Earning Potential of Exports

Enthusiasm must be mobilized by all concerned parties for completing the job of earning foreign exchange by exports, including the enthusiasm of production enterprises, foreign trade enterprises, enterprises that serve export trade, and local and relevant departments. The enthusiasm of production enterprises and producers needs to be mobilized in particular. Export commodity supply, export commodity variety renewal, and the raising of quality and competitiveness in the international marketplace are only possible if the enthusiasm of production enterprises and producers are mobilized.

The CPC Central Committee and the State Council have adopted and formulated several policy measures to encourage export commodity production and to expand foreign exchange earnings from exports, including the autonomy of major enterprises, the appraising and deciding of reasonable costs for foreign exchange requisitions, tax rebates and deductions, rights of holding and use of foreign exchange, suitable bonus increases for staff and workers who

contribute to exports, and establishment of the principles of preferred guarantees for discount credit for the material, power, transportation, and so on necessary for exports. People's governments and departments at all levels should pragmatically implement these policy measures.

All agricultural export production bases, enterprises, and producers should fully recognize the importance of strengthening the foreign exchange earning potential of agricultural exports, firmly implement foreign trade policy under the leadership and unified program of people's governments at all levels and concerned departments, strictly obey relevant rulings and discipline, energetically produce commodities that are of superior quality, low price, marketable, distributive, competetive, and contribute in many ways to the earning of foreign exchange by exports.

Implement the Amalgamation of Agriculture and Trade and the Rational Division of Labor with a centralized Plan, a Centralized Policy, and a Coordinated and Centralized Facing Outward

Implementing the amalgamation of agriculture and trade can take diverse forms. For instance, organize specialized and jointly run export businesses from foreign trade enterprises and production bases; strengthen production base, enterprise, and foreign trade enterprise cooperation; establish the necessary integrated system and close production and sales links; and, organize an export commodities association from production bases, enterprises, and foreign trade enterprises for a coordinated facing outward.

A rational division of labor needs to be put into practice for foreign trade and production enterprises. The principal responsibilities of foreign trade enterprises should be to pioneer in international markets, provide foreign business information, energetically expand sales, and promote the greater production of products that sell well, and other specific foreign trade tasks. The principal responsibility of production bases and enterprises should be to develop product varieties, raise quality, raise standards, lower costs, and energetically complete the tasks of production of export commodities (including scientific research, production, processing, and so on).

All levels of agricultural, livestock, and fishery industries and township and town enterprise management departments should study and set agricultural export production plans for the Seventh 5-Year Plan and for each year, pragmatically implement and energetically complete export production tasks under the state's unified guidelines, according to the locale's actual conditions and the tasks undertaken in foreign exchange earning exports, under the leadership of the people's government, and in consulation with the Ministry of Foreign Economic Relations and Trade.

Agricultural, livestock, and fishery industries and township and town enterprise management departments will have to do a good job of development planning, construction, and management work for agricultural export production and enterprises under people's government leadership and a centralized plan and the coordinated support of concerned departments, and will have to

organize many completely commercialized agricultural companies—for example, soybean, corn, fruit, and green vegetable companies—according to agricultural byproduct items and scales of production, processing, preservation, and transport and as made clear by the Ministry of Foreign Economic Relations and Trade. All companies need to attract the participation of specialized households on all sides, and provide the peasants who have land for which they pay compensation with capital, seedlings, fertilizers, technology, information, and other services. Peasants (specialized households and joint—contract households) to provide company export commodities according to product varieties, quantities, quality standards, and technical forms which are uniform and decided upon through consultation. According to the contract, companies need to give specialized and joint—contract households which undertake export production tasks a dependable redistribution of profits and dependable incentatives need to be given those completing their tasks.

A Good Job Has To Be Done in the Problem of the Matching of Various Agricultural Byproduct Production Links To Solve the Task of Export Production and Sales

The matching of various production links referred to here include: construction of large warehouses in front and rear line areas and equipment for drying, preservation, and storage, construction of exclusive routes for vehicles and boats in harbors and on rail lines, the construction of export purchase outlets, and so on. All that have these need the energetic cooperation and support of the relevant departments and locales, and preference in preparing implementation according to currently subordinate relations and capital channels.

The Agricultural Export Production System Is an Experimental and Demonstration District for the Specialization, Commercialization, and Modernization of Agriculture

Establishment of an agricultural export production system, creation of a large group of export production bases and enterprises, and development of a comparable scale of agriculture earning foreign exchange will not only be able to increase the foreign exchange earning potential of agricultural exports, earn a lot of foreign exchange for the nation, and advance the expansion of farm village and national economies, it will also be possible --due to the export production bases and enterprises theselves possessing better foundations and conditions (bases and enterprises need to be equipped with certain conditions) -- to use a certain amount of capital and foreign exchange, to bring in more advanced technology and equipment, and to implement intensified operation (that is, operation where there is a certain degree of intellectual, technical, and capital concentration). For this reason, it should become an experimental and demonstration district for the specialization, commercialization, and modernization of agriculture, and serve the positive function of promoting China's ongoing specialization, commercialization, and modernization of agriculture.

13152/12948 CSO: 4007/424

WORLD BANK LOANS FOR AGRICULTURE 'DOING WELL'

Taiyuan NONGYE JINGJI XIAOGUO [AGRICULTURAL ECONOMIC RESULTS] in Chinese No 2, 25 Apr 86 p 52

[Article by the Foreign Investment Utilization Office of the Ministry of Agriculture, Animal Husbandry, and Fishery: "The World Bank Feels That Agricultural Loans to China Are Proceeding Smoothly"]

[Text] The World Bank assistant Bureau director for the East Asia and Pacific Region, David Te-na-mu [3676 4780 1191] led a project review group to China from 6 to 15 January 1986 to summarize the implementation stage of World Bank loan projects in China. The group also met with the Foreign Investment Utilization Office of the Ministry of Agriculture, Animal Husbandry, and Fishery.

Seven loan projects worth a total of \$449.2 million among loan agreements China has signed with the World Bank since 1982 are being administered by the Ministry of Agriculture, Animal Husbandry, and Fishery. They include:

- 1. \$60 million for agricultural projects in the north China plain for comprehensive control and improvement of 3 million mu of saline-alkaline land in Shandong, Henan, and Anhui provinces;
- 2. \$80 million for reclamation projects in Heilongjiang Province to reclaim 3 million mu of wasteland and set up a modern commodity grain and legume base area;
- 3. \$100 million to develop rubber in Guangdong Province for planting and replanting 600,000 mu in rubber plantations;
- 4. \$40 million for seed projects to establish 18 modern seed centers in 14 provinces and autonomous regions;
- 5. \$75.4 million for agricultural education and scientific research projects (one period) to equip 11 colleges and scientific research units;
- 6. \$68.8 million for agricultural education projects (two periods) focused on equipping 29 colleges and 12 middle schools;

7. \$25 million for agricultural scientific research projects (two periods) focused on equipping 15 scientific research units and 10 extension centers.

Implementation management organs have been established for all seven projects. Project offices have been established for all of the projects from central authorities down to provinces, prefectures, and counties, as well the agricultural colleges and scientific research units involved in the projects. About 2,000 specialized personnel are involved in project implementation and management. Moreover, various categories of experts have been assigned to participate in project design, construction, bidding, and purchasing work according to work requirements. The agricultural education and scientific research projects, for example, have organized more than 200 professors, instructors, and specialized personnel to participate in compilation of bidding documents and evaluation of bids. In addition, various types of small scientific research groups and advisory committees have been established according to the content of the projects and all types of experts are being brought in to participate in project construction.

Personnel training has been strengthened and a preliminary set of management systems and methods have been established. All units involved in the projects have been closely concerned with personnel training. The north China plain agricultural project, for example, has run 104 short-term training classes for 4,622 people since 1982. The Guangdong rubber project has trained 12,577 specialized personnel in various caegories over the past 2 years. All of the projects have established preliminary planning management, materials management, engineering management, financial management, and bookkeeping and accounting systems to guarantee effective capital utilization and the progress of the projects.

Some of the seven projects already have obtained rather good economic and social results. There has been an obvious improvement in production conditions in the region involved in the north China plain agricultural project. The ability to resist natural calamities has been improved, land fertility has been restored somewhat and output of grain, cotton, oil crops, and other crops, as well as peasant incomes, have grown in comparison with regions not involved in the project. Per capita incomes there have risen to 250 yuan from 100 yuan prior to the project. The implementation of agricultural education and scientific research projects has brought about great improvements in agricultural education and scientific research conditions. The startup rate in experiments in the project units has risen from about 70 percent to more than 90 percent. The plan to send 450 students abroad during the first period has been completed and 53 have finished their work and returned to China. More than 30 have studied for Ph.D.'s and some of the students and workers who have returned to China have taken over responsibility for agricultural colleges and scientific research units. Teacher standards and the quality of scientific research personnel have risen substantially.

Some problems persist in project implementation, mainly in terms of the inadequate quality of equipment purchased through bidding. Other problems include insufficient capital for full outfitting because of readjustments in the prices of materials within China, losses to work schedules caused by natural disasters, and so on.

The head of the World Bank delegation said: "Implementation of the agricultural projects in China has gone rather smoothly and rather well. Good preparatory work for the projects is essential for good project implementation." In regard to the problems encountered in bidding, he felt: "Internationally competitive bidding still is a very good purchasing method and poor quality is an isolated phenomenon."

12539/12624 CSO; 4007/477

# RENMIN RIBAO ON FARM PRODUCT MARKET FLUCTUATION

HKO40131 Beijing RENMIN RIBAO in Chinese 29 Aug 86 p 1

[Commentator's article: "Take a Correct Attitude Toward Fluctuation in Supply and Demand of Agricultural and Sideline Products"]

[Text] Since the peasant households were allowed to handle their farm work independently and the market mechanisms were introduced, China's countryside has entered a fresh stage of developing the commodity economy. There are also some new contradictions in this stage. In recent years, it has sometimes been difficult to sell many farm and sideline products and sometimes difficult to buy them. Short supply and lack of demand appear alternately. How to correctly view and treat such market fluctuations so as to ensure the healthy development of production and circulation has become a question that we cannot evade in our rural economic work.

The foundation for commodity production is the markets. Market fluctuation is an inevitable and normal thing. It is a regular phenomenon in the commodity economy. It is impossible to stabilize production and consumption at a fixed level. Our only choice is to narrow the range of fluctuation. The commodity economy in our countryside is merely in the initial stage, and it will still take a rather long time to perfect the market mechanisms. At present, the agricultural production structure and the rural production structure are still not rational. When the total demand in the national economy changes sharply, it is no wonder the supply and demand of farm and sideline products change greatly and frequently. Therefore, comrades engaged in rural work in all localities should be mentally prepared for this.

In order to ensure the healthy development of commodity production and narrow the range of market fluctuation, we should first ensure the coordinated development of both our production and consumption structures. When production exceeds market demand, peasants will have to sell their products cheaply and their interests will be harmed; if production is reduced too much, there will be a shortage of grain and other farm products on the markets. In particular, because we have not opened the domestic market for some exportoriented farm and sideline products, whenever the conditions in international markets change, production will be greatly affected and peasants are often caught unprepared and can only utter their grievances. In general, the current fluctuation of supply and demand of farm and sideline products appears against the background of the all-round output increases in agriculture and is

the result of the poor coordination of the production structure with the consumption structure, the blockages in the channels for commodity circulation, and the low consumption level. It is a structural fluctuation in the transition from a traditional planned economy to a market and commodity economy.

Market fluctuations cause us losses, and we can also draw some lessons from this experience. The current market fluctuation at least tells us of two facts: First, we should further diversify our production so as to be better able to withstand market fluctuations; second, we should replace the old idea that the more we can produce, the better; with a new idea of appropriate production and should arrange production in light of market conditions. Leading cadres, departments concerned, and producers should all study market for market fluctuation. We must note that it is of urgent significance to tap demands and smooth the circulation of commodities and that this will greatly help consolidate and perfect the market mechanisms. The departments concerned are making greater efforts to facilitate the buying and selling of farm and sideline products and increase the processing and storage capacity for these products. Producers themselves should also try hard to improve product quality so as to make their products more readily marketable. So long as all parties concerned can take a positive attitude to actively participate in market activities and facilitating the movement of goods, then the fluctuation of supply and demand can become a starting point and a motive force in developing and improving market mechanisms.

/12913 CSO: 4007/523

\$122 MILLION PLANNED FOR AGRICULTURAL PROJECT

HK130536 Beijing CHINA DAILY in English 13 Sep 86 p 2

["Special to CHINA DAILY"]

[Text] China is to invest \$122 million in a project that will boost production of cash crops and livestock and create about 41,000 jobs in two southern provinces.

The International Development Association (IDA) will support the project with a credit of \$40 million.

The credit is for 50 years, including 10 years of grace. It carries no interest but has annual charges (0.5 percent on the undisbursed balances and 0.75 percent on the disbursed balances.)

The participating farmers will contribute \$34.5 million towards the cost of the project, the Agricultural Bank of China will put up \$27.8 million, local governments \$16.1 million, and the central government \$3.8 million.

The project will be carried out over five years in the "red soil" area of southern China, so named because of the characteristic red colour of their subsoil. the areas cover some 2 million square kilometres and their good climate and rainfall give them potential for a diversified agriculture.

Until now production there has been concentrated on the low-lying parts of the region, but the IDA credit will help finance the development of idle and little-used land in the uplands.

Abut 27,000 hectares of idle land will be terraced, planted and irrigated. Farm access roads will be built and existing infrastructure will be improved or extended. Houses, schools, clinics, warehouses, and laboratories will be built and construction and farm equipment will be provided.

/12913

CSO: 4020/436

PER CAPITA SAVINGS SURPASS 100 YUAN

Beijing NONGMIN RIBAO in Chinese 14 Jul 86 p 1

[Article: "Per Capita Savings of China's Peasants Surpass 100 Yuan--Focus of Rural Financial Work During Second Half of 1986 Is: Strive To Support Production of Grain and Marketable Products from Township and Town Enterprises, Guarantee Capital Supplies To Purchase Farm and Sideline Products"]

[Text] Peasant per capita savings in China's banks and credit cooperatives surpassed 100 yuan for the first time during the first half of 1986. A new situation has appeared in rural financial work during 1986, as manifested primarily in the following four areas:

- 1. An Increase in Network Points, Substantial Rises in Savings Deposits: The Agricultural Bank added more than 2,600 new savings offices and more than 900 special counters and agency stations throughout China during the first half of 1986. Total savings in savings deposits in agricultural banks and credit cooperatives in China stood at 84.9 billion yuan at the end of June 1986, up 12.9 billion yuan over the beginning of 1986 and up an additional more than 4.4 billion yuan over the same period in 1985. Agricultural banks also have issued 600 million yuan in financial bonds. Compared with past years, the pickup in rural savings occurred more than 1 month ahead of usual.
- 2. Credit Structures Are Becoming Rational and the Proportion Used for Crops and Breeding Is Rising: Agricultural banks and credit cooperatives had granted more than 30 billion yuan in agricultural credit by the end of June 1986. The proportion used for crops and breeding rose from 61.8 to 68.5 percent, while industrial and commercial loans and personal loans to peasant households declined. The credit is covering wide areas, is being issued in a timely manner, and is adapted to the needs of production.
- 3. Regional Credit Policies Have Been Implemented, Economic Results Have Improved: Agricultural banks in all areas have made actual local conditions the foundation for selecting the focus of loans. Agricultural banks in coastal regions and economic zones opened to the outside world have given primacy to support for agriculture earning foreign exchange. Zhongshan, Shunde, Nanhai, and Xinhui counties in Guangdong Province are supporting

810 enterprises earning foreign exchange that have increased the value of their exports by 31.4 percent. The Suzhou City Agricultural Bank is supporting more than 100 enterprises earning foreign exchange and foreign exchange income is up 40 percent over the same period in 1985. Banks at all levels also are using their own business services to establish horizontal integration with enterprises. According to statistics from branch banks in 14 provinces, municipalities and autonomous regions, more than 59,000 rural enterprises and urban industrial and commercial enterprises received support during the first half of 1986, while different forms of linkages have been established with scientific research organs.

4. Management of Funds Has Been Reinforced, Funds Circulation Has Been Promoted: According to statistics from 16 branch banks, more than 1 billion yuan of accumulated and idle credit had been cleared up and collected by the end of June 1986, enterprises were supplied with more than 1 billion yuan in circulating capital, and enterprises were assisted in bringing 1.5 billion yuan in loans in arrears up to date. There have been rather substantial developments in funding adjustments. A survey of 10 branch banks indicates that more than 1.4 billion yuan in capital was borrowed from other areas and systems, which has raised capital-utilization rates.

The Central Office of the China Agricultural Bank has proposed at the National Branch Bank Directors Conference currently in session that the focus of rural finance work during the second half of 1986 should be: utilizing capital collection to support the production of grain and marketable products of township and town enterprises, guaranteeing capital supplies for purchases of farm and sideline products, further implementation of regional credit policies, and support for horizontal integration within the rural economy to invigorate the rural economy.

12539/12624 CSO: 4007/477

# OFFICIAL INTERVIEWED ON AGRICULTURAL TAXES

Beijing NONGCUN GONGZUO TONGXUO [RURAL WORK NEWSLETTER] in Chinese No 6, 5 Jun 86 pp 42-43

[Interview with a responsible person from the Agricultural Finance Department, Ministry of Finance under the rubric "Answers To Tough Questions":
"On Questions About Agricultural Tax Collection"; date and place not given]

[Text] Many readers have recently asked in their letters about current agricultural tax collection. At the invitation of this newsletter, a responsible person in the Agricultural Finance Department, Ministry of Finance answers reader's questions briefly as follows:

[Question] What is included in the current scope of agricultural tax collection?

[Answer] The agricultural tax is a tax collected from all units and individuals engaged in production that have agricultural income, and is a means whereby the state secures, in accordance with tax laws, monetary income and the national income allotment for agricultural departments. According to "PRC Agricultural Tax Regulations" all who take part in agricultural production and all units and individuals with agricultural incomes are agricultural tax payers, and should pay agricultural taxes in accordance with the law. The current scope of agricultural tax collection includes: (1) Grain and tuber crop income; (2) commercial crop income, including cotton, hemp, tobacco, oil, sugar, and other commercial crop income; (3) agricultural and forestry special product income, including income from fruit, tea, mulberry, flowers and plants, nursery stock, and unprocessed medicinal products; income from bamboo, natural rubber, tussah silk, wood oils, raw lacquer and other special products; and, income from small animal products raised in fresh water and on sandy shoals; (4) other income which the State Council has ruled on or approved for the collection of agricultural taxes.

[Question] How are agricultural taxes calculated and collected?

[Answer] Different agricultural incomes are individually calculated and taxed according to the following methods: Grain and tuber crops are calculated and taxed according to normal yearly yields. Once the normal

yearly yield is arrived at and remains the same for a number of years, taxes do not increase when production increases. Commercial crops are calculated in reference to normal yields from growing grain crops. Since the output value per unit area for commercial crop cultivation is generally higher than the output value for grain crop cultivation—and some are much higher—agricultural income should generally be calculated according to the size of the profits from the commercial crops and in reference to the grain crop burden, and must be generally set somewhat higher than the standard for the normal year in order to make the burdens roughly even. Agricultural taxes are to be calculated and collected by adopting differential tax rates by region to suit tax rates to differing agricultural economic conditions, and to equalize the burden on peasants in different regions.

Agricultural and forestry special products are to be calculated and taxed according to incomes from these special products. Actual calculation of product revenues are to be handled independently according to the differing circumstances. Taxes can be collected by the state at the time of purchase for those products which are primarily state purchased. Products where the larger proportion is produced and sold by the producer can be calculated and taxed by appraising income through survey and evaluation, or by adopting some other handy method. According to State Council regulation, the tax rate for agricultural and forestry special products is from 5 to 10 percent. The tax rates for different products are to be individually fixed within this range by provincial, self-governing region, and municipality people's governments according to the profits earned from different products, and under the principle that it not be lower than the level for the actual burden for grain fields. The tax rate for a few products that earn high profits is not to exceed 15 percent.

[Question] What rulings are there for reduction of and exemption from agricultural taxes?

[Answer] The agricultural tax regulations stipulate that the following agricultural incomes are either exempted from agricultural taxes or given preferential treatment for a certain period of time: (1) Agricultural income from land where scientific research organizations and agricultural schools carry out agricultural experiments, and agricultural crop cultivated on unoccupied strips of land next to houses; (2) the agricultural income from taxpayers who legally either reclaim land or use other methods to expand the area of cultivated land is exempted from agricultural taxes for from 1 to 3 years starting the year when it produces income; (3) income from land reclaimed through planned immigration is exempted from agricultural taxes for from 3 to 5 years starting the year when there is an income; (4) taxes are exempted for taxpayers for 3 to 7 years starting the first year there is an income from mountain land which has been newly reclaimed and cultivated, or has been newly reclaimed and returned to cultivation, in mulberry fields, tea plantations, fruit plantations, and other commercial forests. Taxpayers are exempt from paying taxes in cases of crop failure due to flood, drought, wind, hail, and other natural disasters according to the degree of crop loss--less exemption for lesser

losses, more exemption for greater losses, and full exemption for total losses. Family members of revolutionary martyrs, military people disabled in the revolution, and others in the countryside who have difficulty paying taxes because of a lack of labor or for other reasons can, with approval by the people's government at the county level, be cared for by having their agricultural taxes lowered or by their being exempted from agricultural taxes. In impoverished regions where peasants have difficulty in production and livelihood, assistance can be given by reducing agricultural taxes under the precept that the policy of reducing or exempting taxes and the job of tax collection be carried out [only] after a decision is made by provincial, self-governing region, or municipal people's government.

In handling reduction and exemption of agricultural taxes, the taxpayer should first of all report the facts. A proposal stating the subject and the amount which is to be reduced or exempted is forwarded to the county government for examination and ratification founded on a thorough investigation by tax collection organizations and by democratic evaluation and decision. Policies should be thoroughly carried out, and reductions and exemptions are to be reasonable. In principle, verification according to the tax figure which has been reduced or exempted as stipulated by the policy should reach the taxpayer who is to receive a tax reduction or exemption before tax collection. First deduct the reduction, and then collect taxes. This is to avoid treasury refunds. Taxes that have been approved as requiring reduction or exemption and have been refunded by the treasury are to be handled individually by household, and no one is allowed to intercept or divert the return for other uses.

[Question] What is the real burden of China's agricultural taxes?

[Answer] It has been the consistant guiding principle of the party and state on problems of peasant burdens to have unified planning for the nation's cities and countryside with due consideration for the interests of the three sides of the state, collectives, and individuals. The policy for agricultural taxes since the establishment of the PRC has been for making burdens stable and reasonable. Agricultural tax collection was basically stabilized in the First 5-year Plan at 1952 tax collection levels. Somewhat more taxes were collected in 1958. There was a large readjustment downward in 1961. In the more than 20 years since, until now the agricultural tax burden level has remained steadily at the original levels. Alongside the growth in agricultural production, the real proportion of agricultural yields taken up by the agricultural tax burden has dropped yearly. In 1957, the real proportion of yields in agriculture taken up by the regular taxes of national agricultural taxes and local surcharges was 11.6 percent. It has now dropped to about 3 percent. It is higher in some places and lower in other places, but overall it is proper to say that the agricultural tax burden is light. What needs stressing here is that it is necessary to make a strict distinction between agricultural taxes and other apportionments and extractions. Finance departments have stated time and again that absolutely no unit or individual is allowed to apportion and extract any funds from the peasants in the name of collecting

agricultural taxes. If a few localities are doing this, it is wrong and should be firmly corrected.

[Question] Does conversion to collection of money in place of grain according to the "inverse 3:7" price ratio increase the burden on peasants?

[Answer] Agricultural tax regulations stipulate that agricultural tax burdens be calculated in grain (local grains, such as rice, wheat, and so on). For many years agricultural taxes have been collected principally in grain. To suit the growth of farm village commodity production and the needs of farm village economic reform, agricultural taxes were changed with State Council approval starting in 1985 from being collected in grain to being converted into money. This is an important reform of China's agricultural tax collection system. Conversion into money is the carrying out of tax collection by converting the quantity of grain which should be collected in agricultural taxes and calculating it in currency. Agricultural taxes are uniformally converted into money according to the "inverse 3:7" price ratio of state grain purchases (including agricultural taxes for commercial crops). Actual crop quantities have not increased. Hence, there has not been an increase in the real burden for peasants. Looked at from a year of practice, cadre and peasant masses in the majority of places endorse this reform of agricultural taxes.

13152/9190 CSO: 4007/454

# IMPACT OF REDUCED FERTILIZER IMPORTS SURVEYED

Beijing NONGMIN RIBAO in Chinese 1 May 86 p 2

[Article by Wang Wei [3769/0251]: "This Year's Chemical Fertilizer Total Demand and Total Transactions Adopt an Increasing Trend; Analysis by the Relevant Department in the Ministry of Commerce; Market Prediction"]

[Text] According to survey analysis by supply and marketing cooperatives and agricultural fund companies, transactions of chemical fertilizer for this year are in a growth trend after 2 years of continuous decrease. But there is much disparity between the different kinds of products and differences in supply and demand are larger. Analysis by kind follows.

Nitrogenous Fertilizer Demand Increases, the Gap Is Large

Last year's total national sales for nitrogeneous fertilizer by commerce departments was 44.48 million tons, a 9.53-percent decrease over the preceeding year. There is still a significant gap this year between supply and demand, and there are disparities between varieties as the need of society increases this year. Urea is of good quality, is highly effective, easy to use, and sales have been good for a long time, but contradictions in supply and demand are large. Simple nitrogeneous fertilizer of ammonium bicarbonate, which took up 60 percent of the total production of nitrogenous fertilizer's, will show obvious improvement in sales this year because of the State Council's decision to adopt the temporary measure of lowering its price and decreasing imports of superior quality nitrogenous fertilizers. It is only necessary to speedily implement the price-cutting measure, encourage peasants to produce more grain by applying more simple chemical fertilizer, and sales will have a larger increase over those of last year. There are, however, disparities between districts. Although demand has increased in Yunan, Sichuan, Shanxi, Hunan, Beijing, Shanghai, and Heilongjiang, production is sizable and still exceeds sales; a portion can be exported. In some other places, supply and demand are basically even or supply does not meet demand. Portions of some areas might sell out in the peak season of fertilizer use. The change in quantities of ammonium nitrate and ammonium sulphate produced and sold is not large, supply and demand are basically balanced, and its proportion in nitrogenous fertilizer sales has dropped yearly. Ammonium chloride production exceeds demand. As for the Dalian Chemical Factory and the Tianjin Alkaline Factory's

production of ammonium dichloride, sales volume in the northern arid district is still increasing a little, though the sales price has dropped greatly. There is still demand in the southern rice paddy districts, but exports are difficult and cannot be transported. Liquid ammonium hydroxide, being an aqueous nitrogenous fertilizer, is easy to use and losses are less volitile, but sales volume has dropped for successive years. An instance of the above is the 30-percent drop last year for Shanghai.

# Phosphorus Fertilizer Demand Rebounds Everywhere

Demand in various places rebounded generally and the scope of the rebound was a bit larger in some areas. In the past several years, industrial production dropped and a large group of enterprises stopped production due to nationally produced phosphorus fertilizers, thus simple phosphorus fertilizers in particular, were seriously unsalable. Quantities used in agriculture have dropped for consequetive years, thus the nitrogen-phosphorus ratio is out of balance. The bringing into play of the benefits of increasing nitrogenous and potash fertilizer production has already been affected. The drop in the content of all phosphorus and water aqueous phosphates reflected in the soils of many areas will, if the addition of phosphorus fertilizers continues to drop, necessarily bring inestimable harm and affect future agricultural production. In this connection, attention has already been drawn, or is in the midst of being drawn, to it, and it is predicted that there will be a very large increase over last year in sales volume for society this year. Except for Yunnan, Guizhou, Sichuan, Zhejiang, Hebei, and other places where phosphorous silicate resources are plentiful, phosphorous fertilizer yields larger, and supply still exceed demand, there will be gaps to various degrees in supply and demand in other places.

# Potash Fertilizer Sales Situation Looks Good

Total sales last year by commerce departments nationally for potash fertilizers were 905,000 tons, an 8.24-percent drop over the preceeding year. Supply and demand has changed somewhat for this year. The principle area of sales and use for potash fertilizers is currently still the south central area, especially the provinces of Hunan, Guangxi, and Guangdong. Total sales last year for these three provinces amounted to 462,000 tons, 51 percent of that nationally. Jiangxi, Zhejiang, Henan, Fujian, and Jaingsu are second, but the sales sitution looks good in some northern areas, such as Hebei, Liaoning, and so on. Sales for this year in the above-mentioned areas are still tending to rise, but there are shortages in the raw materials available for this year because of drops in imports and reductions early this year in commercial reserves. This phenomenon deserves attention.

#### Complex Fertilizers Are Welcomed

Total sales last year by commercial departments nationally were 7.75 million tons, a 31.2-percent increase over the preceding year, and set an all-time high. Peasants have welcomed complex fertilizers. This year demand increased greatly, and ammonium phosphate and tri-element compound fertilizer in particular have been proclaimed as "divine fertilizers" by the great

masses of peasants and have sold even more speedily. The principle area of complex fertilizer sales is currently still in the northeast and Huabei areas. Sales volumes in these two areas are nearly one-half the national volume. This year, since imports have been reduced by a large volume and complex fertilizers are basically not produced within the country, it is estimated that supply-demand contradictions will be very prominent.

# Trace-Element Fertilizer Market Outlook Is Vast

Along with the unbroken rise in scientific cultivation standards of peasants and the increase for successive years in the quantities of nitrogenous, phosphorous, and potash fertilizers used, there has been an ongoing and unbroken expansion of sales and quantities used of all kinds of trace-element fertilizers, also achieved the very good benefits of increased production, and was known and accepted more each day by the great masses of peasants. If zinic sulphate is applied on paddy rice, corn, and other crops, by investing a few dimes on each mu of land it is possible to get a return of increased production of over 100 jin. Of all the trace elements, zinic sulphate is the variety which is used in the largest quantities, over the widest area, and which has the best future for growth. Moreover, the use of boric fertilizers on rape, oranges, and tangerines, and cotton, the use of molybdenum fertilizers on soybeans, the use of copper fertilizers on paddy rice, iron fertilizer on fruit trees, manganese fertilizer on wheat, broad beans, and so on have all achieved satisfactory results in increased production. The increased production results are sometimes decidedly obvious. Looking at current and future trends, the outcome for trace-element fertilizer markets is absolutely vast, but current production and operation is still unable to get the position it should have with relevant departments and enterprises. If these problems can be solved quickly, trace-element fertilizer sales and quantities used will have a relatively greater increase.

13152/12948 CSO: 4007/424

FIRST LAND DEVELOPMENT PLAN UNDERWAY

OW141441 Beijing XINHUA in English 1315 GMT 14 Sep 86

[Text] Beijing, 14 September (XINHUA)--China's first national program for land development is being worked out, it was learned here today.

A draft program, up for discussion at a national meeting held by the State Planning Commission today, covers utilization of natural resources, overall distribution of productive forces, comprehensive regional development, and management of land.

The exploitation and utilization of land, water, minerals, forests and sea make up an important part of the draft program. To solve the problem of land shortage, for example, the draft calls for higher efficiency in the use of land, adjustment in land utilization pattern and control on the use of land for construction purposes. To tackle the problem of severe water shortage in north China, it proposes diverting water from rivers in the south to the north. Distribution of energy bases is also included.

With regard to the distribution of productive forces, the draft program lays different emphasis of economic development for the eastern, central and western parts of the country, marking off areas as centers of farming, forestry, animal husbandry, fishery, oil and coal production. A blueprint for the expansion of the transportation network is also provided.

A number of areas will be designated as key areas of economic development: economically-developed areas, energy and minerals development areas, key areas in the distribution of productive forces and pivotal areas in opening to the outside world.

Land management will focus on the harnessing of rivers, control of soil erosion on loess highland and land decertification in north China, improvement of saline-alkali soil in the Yellow River and Huai River basins and environmental protection in the densely populated areas.

/12913 CSO: 4020/436

IMPROVED TREATMENT OF AGROTECHNICIANS URGED

Beijing RENMIN RIBAO in Chinese 19 Jul 86 p 3

[Article: "Specialists in the China Agriculture Society Earnestly Request Reforms To Improve the Treatment of Agrotechnicians"]

[Text] According to a report in ZHONGGUO KEJI BAO [China Science and Technology], some experts in the China Agriculture Society have called for reforms to change the difficult situation now facing rural technical service organs throughout China by improving the treatment of agrotechnicians. Otherwise, agricultural production in China will be seriously affected.

The experts in the China Agriculture Society pointed out that agrotechnical service organs are very ill-adapted to the economic development situation, as manifested in the following main areas:

Agrotechnical service units have shortages of administrative funds. Tongcheng County in Anhui Province had contractual responsibility administrative expenses of 129,000 yuan in 1985. After employee wages, business expenditures per capita were only 1.65 yuan per month. Guizhou Province's Tongren Prefecture Agriculture Bureau reported that the bureau, which has 105 employees and 10 counties under its jurisdiction, had only 50,000 yuan in business funds, and even business trips were difficult. The shortage of administrative funds in some counties has meant that they have even been unable to accept newly assigned college and polytechnical school graduates.

Agrotechnicians have poor working conditions and simple, crude equipment. There basically are no instruments or equipment for agrotechnical extension work, and they have had to depend for a long time on "their legs and mouth." Agrotechnical personnel in some areas have been in a situation of "no desk for their office, no bowls to eat from and no place to sleep" for a long period. Guizhou Province's Tongren Prefecture, for example, currently has 82 prefectural and township agrotechnical stations and 1,069 employees. They have less than 1.6 square meters of office space per person and six agrotechnical stations have no offices and 33 stations have no dormitories at all. Xiangxi Tujia-Miao Autonomous Prefecture has 60 stations, but three-fourths of them have no fixed buildings or the necessary instruments and equipment.

The poor treatment of agrotechnicians has caused many of the personnel to "leave the area." State Council resolutions concerning this question stipulate that wages paid to agrotechnical personnel at the first line of production could float upward one grade, but many areas cannot afford to do so. Most agrotechnical service personnel below the county level and peasant technicians are recruited through testing. Most of them already have worked for 10 or 20 years, but their wages are lower than those of educational personnel, financial and taxation personnel, broadcast personnel, and others, which has caused many peasant technicians to change their line of work. Hengyang City in Hunan Province originally had 451 peasant technical personnel, but most of them have left. The number of peasant technicians in some counties in Zhejiang Province has fallen by 70 to 80 percent.

The persistence of these problems over long periods has seriously affected the extension and popularization of advanced agricultural technologies. Locusts, wiped out 30 years ago, have reappeared and there has been an obvious increase in the area of locust outbreaks during 1986. There was an outbreak of wheat scab in Henan Province during 1985, and the lack of guidance by agrotechnicians caused a reduction of nearly 900 million KG in wheat output in Henan.

Given the present difficult situation in agrotechnical service work, experts have proposed that:

- 1. State policies concerning reinforcement of agrotechnical service organs and manpower should be implemented and treatment of peasant technicians should be improved. We also should strengthen construction of township and village agrotechnical service organs.
- 2. Agrotechnical service organs should be permitted to manage the relevant agricultural means of production. County plant protection stations or plant protection companies, for example, can be permitted to "evolve and sell pesticides," agrotechnical stations can adopt a method that integrates technical contractual responsibility with supplies of materials and collect low-level service-compensation fees to make up for some of their inadequacies in administrative funds. It is hoped that finance and taxation, commercial, industrial-commercial, and other departments will provide support.
- 3. State and local financial administrations should increase administrative funds for agrotechnical units according to actual conditions to permit agrotechnicians to make full use of their skills and knowledge and serve rural S&T extension work.

12539/12379 CSO: 4007/474

#### BRIEFS

QUALITY FARM PRODUCE BASES--Shenyang, 14 September (XINHUA)--Work has begun to build 113 quality agricultural produce bases throughout the country, according to a recent meeting held by the Ministry of Agriculture, Animal Husbandry and Fisheries in Xingcheng, Liaoning province. These bases will produce fine quality fruits, vegetables, rice and other farm products. By the end of August, it was disclosed at the meeting, more than 100 million yuan had been spent by localities and the state. Dalian and Harbin in northeast China, designated to produce superior quality apple and vegetables, have made twice as much investment as they are asked. The 113 quality farm produce bases are spread in 27 provinces, municipalities and autonomous regions and are scheduled for completion by the end of the Seventh 5-Year Plan period in 1990. An official from the Ministry of Agriculture, Animal Husbandry and Fisheries said that 59 quality fruit bases and 11 quality rice producing bases have already completed projects for providing fine strains of seeds and nurseries. Projects for storing and preserving fruit and for processing rice have started. It is expected that all these bases will begin to provide superior farm produce to domestic and world markets within the next four years. [Text] [Beijing XINHUA in English 0730 GMT 14 Sep 86 OW] /12913

AQUATIC PRODUCTS HARVEST-Beijing, 9 September (XINHUA)—The total output of China's aquatic products is expected to reach eight million tons this year, the Aquatic Products Bureau of China told XINHUA today. Since last year, great progress has been made in the quantity, variety and quality of aquatic products. Compared with the same period last year, major aquatic products have shown over-all growth during the first half of this year. Fresh and seawater production has increased more than 500 thousand tons over last year. This year, China has paid more attention to the selective-breeding of fish, and the production of shrimp and crabs has reached its highest output of recent years. The use of granulated feed is spreading fast. Now, most fishing areas are willing to buy granulated feed or are preparing to construct feed-processing plants. Because of improved varieties and the development of high quality special products, China's aquatic products have received wide acclaim and a growing market awaits them. [Text] [Beijing XINHUA in English 0657 GMT 9 Sep 86 OW] /12913

STUDENTS AID IN UNDERDEVELOPED AREAS--Beijing, 15 September (XINHUA)-Teachers and students from eight major agricultural universities will go to
underdeveloped areas for three years to promote advanced science and
technology. The universities include the agricultural universities of

Beijing, Shenyang, Nanjing, Northwest China, Southwest China, Central China and the Beijing University of Agricultural Engineering, according to a recent decision by the Ministry of Agriculture, Animal Husbandry and Fisheries of China. The experts from the Agricultural University of Central China will introduce cultivation techniques for mushroom and edible fungi to Dabie Mountain in Central China's Hubei province. After investigating the situation in Jianping county in northeast China's Liaoning province, representatives from Shenyang University of Agriculture will help local residents with more than 30 production items which will increase economic results and better utilize natural resources. Other areas to receive help include counties in Shanxi, Hubei, Sichuan and Guangdong provinces, and Yanqing county near Beijing. [Text] [Beijing XINHUA in English 0242 GMT 15 Sep 86 OW] /12913

FORESTRY INDUSTRY REFORM--Addressing the current National Symposium on Reform of the Economic Structure of China's state-owned forestry industry, Yang Zhong, minister of forestry, pointed out: Presently, the paramount issues in China's forest zones are: 1) a crisis in forestry resources; and 2) economic woes faced by the enterprises because of internal and external economic entanglements. Reform of the economic structure is the best solution to the above problems, he stressed. Dwelling on the measures for reform of the economic structure of the state-run forestry industry, Yang Zhong said: It is first necessary to readjust timber production, and press for solving the problem of excessive lumbering. Second, it is essential to increase investment in the forestry industry in order to expand the reserve forest resources. Third, it is imperative to readjust the production structure and fully tap and utilize the various resources of the forest zones. To foster forestry development we must develop industry and sideline productions and promote lateral economic cooperation between the forest zones. Fourth, we must ensure the healthy development of the collective economy by shattering the publicly owned enterprises' excessive and rigid control over the collective enterprises. Fifth, we must improve operations and management so as to further perfect the various forms of production responsibility systems for the forestry industry. [Text] [Beijing Domestic Service in Mandarin 1100 GMT 27 Aug 86 OW] /12913

cso: 4007/523

ANHUI

#### BRIEFS

FLOOD PREVENTION—A 270-km Bengbu-Huaibin microwave communications line in the Huaihe River Basin, China's first project to modernize communications for flood prevention, has been completed and put into operation. This line was purchased by the Chinese Government last year, using the grant provided by the Italian Government. It was jointly installed by Chinese and Italian engineers and technicians. The project comprises a data processing central in Bengbu; six microwave stations in Bangbu, Fengtai, Yingshang, Huaibin, and two other places; and eight telemetric stations located in the flood region. The computerized telemetric stations regularly measure water level and rainfall. By means of the microwave facilities, the data obtained is automatically input into the central station to be processed by computers and flood warnings will be issued promptly. [Summary] [Hefei Anhui Provincial Service in Mandarin 1000 GMT 23 Jun 86 0W]

WATERMELON OUTPUT--Based on statistics, in Anhui the area sown to watermelon is 1,160,000 mu, an increase of 360,000 mu over last year; it is estimated that gross output will be about one billion kilograms. [Excerpt] [Hefei ANHUI RIBAO in Chinese 20 Jun 86 p 2]

CSO: 4007/455

GUANGXI

### RECLAMATION DISTRICT BROUGHT INTO LINE WITH STATE POLICY

Beijing ZHONGGUO NONGKEN [STATE FARMS AND LAND RECLAMATION] in Chinese No 3, 24 Mar 86 pp 36-37

[Article by Liang Zhenzhuo [2733 2182 0587], director of the Guangxi State Farms and Land Reclamation Joint Agricultural, Industrial, and Commercial General Company: "Persist in Putting Reform First; Reclamation Districts in Various Places"

#### [Text] Guangxi:

In recent years Guangxi Province's state farms have had very big growth. Currently in the reclamation district, 2.36 million mu of land are in operation, and there are a total of 80,000 staff and workers, 50 farms, 6 directly affiliated industries and enterprises, 117 farm-run industries, 264 commercial network outlets, 1 staff and worker university, and 2 research institutes. These units are widely scattered across 7 perfectures and 31 counties and cities of the self-governing region.

After 35 years of arduous struggle, the reclamation district has already established a commodity production base using principally subtropical crops and a cooperative agricultural, industrial, and commercial operation. It has become an important base for the export of Guangxi Province's agricultural and livestock products. According to the statistics for the 5 years of the Sixth 5-Year Plan period, the total production value for industry and agriculture was 940 million yuan, a 10.8-percent mean annual increase. Profits were 71.82 million yuan, an 8.3-percent annual increase, and 70.52 million yuan were turned over to the state in taxes, a 9-percent annual increase.

In the midst of reform, our reclamation area principally seized the following several tasks:

1. Energetically Carried Out Reforming the Economic Systems of Enterprises

After the 3rd Plenum of the 11th CPC Central Committee, we, like our reclamation district brethren nationwide, implemented complete fiscal responsibility for enterprises, implemented the "four certains and one reward," "joint production rewards," and other forms of the economic responsibility system for staff and workers, and launched an attack against the two "big rice pots."

In the spring of 1984, we also implemented everywhere staff and worker family farms, created a model of a large farm encompassing small farms, and brought about a satisfying step forward in the reform of the state farm economic system. Currently, 23,808 family farms with 41,068 workers and staff participating have been created in the reclamation district, 95.5 percent of the reclamation district's total agricultural and livestock work force. Creation of the family farm better solves the problems of closely linking the means of production with laborers, and closely linking the fruits of labor with the rewards for that labor, mobilizing the enthusiasm of workers and staff, and promoting growth in productivity. The self-governing region's general company steadily shifted the powers of production and operation of people, finances, material, production, and supply over to enterprises on the basis of the decision of the 3rd Plenum of the 12th CPC Central Committee, and a portion of the administrative- and directive-style organization changed into a managerial- and service-style organization, shrinking nonproductive personnel, reducing the burden of workers and staff, and strengthening enterprise vigor.

2. Spread the Strengths and Avoid the Shortcomings, and Adjust Production Structure

Fully tap the advantages of the subtropical region of the Guangxi reclamation district, change the structure of only dealing in rubber, put into practice an agricultural structure which is based on fruit and is cooperatively run, and make hemp, tea leaves, sugarcane, rubber, grain, livestock, forestry, and other production achieve comprehensive growth. The area in fruit grew from 30,400 mu in 1978 to a current 74,100 mu. Annual yields rose from 3.15 million jin to 81.23 million jin. Tea yields increased from 12,000 dan to 5,300 dan. Sisal hemp yields rose from 2,169 tons to 4,755 tons. Others, such as forestry, livestock, the raising of freshwater fish, and so on, have all also expanded. In industry, energetically develop processing industries that serve agriculture and family farms, and build a group of industries of a new kind that link agriculture and industry. Six sugar factories with a daily pressed sugarcane capacity of 4,850 tons, 6 canning factories with an 18,000-can annual production, 6 rope factories with a 4,000-ton annual production of white palm rope, and 22 brick factories with an annual production of 100 million red bricks have already been built by the reclamation district. In commerce, 264 commercial network outlets were set up, a 37.5-percent increase over 1978. Having gone through several years of adjustment, the Guangxi reclamation district's agricultural, reclamation, and production structures have already brought into preliminary play the advantages of the district, making growth in primary, secondary, and tertiary industries better coordinated and achieving better economic results.

3. Do a Good Job of Consolidating Enterprises, and Raise Agricultural and Reclamation Enterprise Quality

The Guangxi reclamation district was included among the 56 units in the plan for enterprise rectification (including 46 state-run farms and 10 industries). Having undergone rectification, leadership groups were changed according to the requirements of ability and political integrity. According to that plan,

the mean age for new leaders was 43.4, included 182 with upper-middle technical and high school or better cultural levels, 29.7 percent more than before rectification. There were 116 with professional titles, an increase of 54 from before rectification. After rectification, state farms and land reclamation enterprises further perfected economic responsibility systems of various kinds, and formed a preliminary managerial system which joined responsibility, power, and benefits. At the same time, political ideology work in enterprises was strengthened, and construction of spiritual civilization promoted. A foundation was laid for the modernization of enterprise management.

Reform To Promote Development: Currently, the Guangxi reclamation district is fighting toward the goal of establishing "the three bases and one center": a production base for the stabilization of domestic and foreign trade products, a model base for specialization, commercialization, and modernization of agriculture, a supply base for nonstaple food production in major cities and factory-mining districts, and a service center for farm villages for advanced techniques, transportation, and sales.

13152/12947 CSO: 4007/409

HEILONGJIANG

#### DEVELOPMENT STRATEGIES OUTLINED

Beijing NONGYE JISHU JINGJI [ECONOMICS FOR AGRICULTURAL TECHNOLOGY] in Chinese No 4, Apr 86 pp 33-36

[Article by Yu Yintang [0060 5593 2768] and Dai Shuxin [2071 3579 0207]: "A Discussion of Strategies for Developing Heilongjiang Province's Dominant Industries"]

[Text] To permit additional improvements in readjustments in industrial structures and development of our dominant industries and establishment of dominant industry systems, this article will make actual conditions in Heilongjiang Province the starting point for a preliminary discussion of several points.

I. Apply the Marxist Principle of Differential Land Rents To Readjust Industrial Structures and Establish Dominant Industries Based on the Rural Commodity Economy System

Readjustment of industrial structures is a strategic measure for the transformation of rural areas from a self-sufficient natural economy into a commodity economy. If we wish to do well in readjustments in industrial structures, we must observe a special law of commodity production—and a concrete manifestation of the law of vlaue in agriculture—the principle of differential land rents. This is a theoretical foundation that can guide readjustments in industrial structures.

There are differences in principle between agricultural production and industrial production in the role and form of the law of value. Industrial production determines value by using costs plus average rate of profit. That is to say, industrial production conditions undergo competition and there are opportunities for equal utilization for each capitalist. Agriculture, however, is different in that Marx figuratively employed a waterfall-powered machine as a metaphor when he said that "controlling this natural force still may cause it to become a monopoly in the hands of the controller. This sort of natural force in its essence is not due to the fact that this sector of production always has the necessary conditions nor that this sector of production normally can form the conditions." (Footnote 1) (LDAS "KAPITAL", Vol 3, 1966 edition, pp 756, 757) Because the limited nature of land in agricultural production means that those who administer land with superior natural fertility and location can

obtain rather stable surplus incomes in a situation in which production prices for lower grade products determine market prices. This means that greater amounts of differential incomes are earned. Under private ownership of land, this becomes the source of differential land rents. Under a socialist system with a commodity production, however, this becomes the differential income of labor. We can use soybean production as an example. According to a 1979 survey of 73 teams in 58 counties in the three northeastern provinces, the net income per mu of soybeans was 4.5 yuan in Liaoning, 8.1 yuan in Jilin and 17.6 yuan in Heilongjiang. This means that the income per mu of soybeans in Jilin was less than half that in Heilongjiang, and that Liaoning was only half as much as Jilin, so the relative income differential between Liaoning and Heilongjiang is a factor of 4.

The substantial differential incomes in soybean production in Heilongjiang are apparent, but the situation is different for corn. Corn yields per mu were 717 jin in Liaoning, 560 jin in Jilin and 444 jin in Heilongjiang in 1979. The net income per mu was more than 21 yuan in Liaoning and Jilin and more than 25 yuan in Heilongjiang, only 4 yuan more than in Liaoning and Jilin. It is obvious that if each province made full use of its own advantages and produced goods with greater net incomes, then the state could use fewer inputs and obtain greater output and derive optimum economic results. For this reason, readjustments in industrial structures based on dominant resources can provide benefits for the state as well as local areas. The surplus income in these dominant industries has a managerially monopolistic quality, so it is not only rather stable but also cannot be obtained by regions lacking these production conditions. This can lead to permanent competition between commodities in these dominant industries.

In consideration of this fact, readjustments in industrial structures in rural areas should begin with local natural resources and focus closely on the goal of developing the commodity economy, and they should take aim at Chinese and international markets and establish unique structure systems for local dominant industries.

II. Make Readjustments in Crop Structures the Breakthrough Point, Lay a Foundation for Development of Dominant Industry Systems

Readjustments in internal farm structures occur mainly in the form of crop structures. Because agricultural production is a combination of social reproduction and natural reproduction, crop structures essentially involve proportional inputs of human labor. They also form the foundation of rural industries as a whole. By starting with real conditions in Heilongjiang Province, we feel that the focus in crop-readjustment strategies should be superior commodity grain, special cash crops, and high-yield forage grass.

For grain crops, we cannot be satisfied with the usual recommendation that we establish base areas for commodity grain. Instead, we must make the establishment of base areas for superior-quality commodity grain a key

short-term task and long-term development strategy. The main thing is not, however, that Heilongjiang has advantages in normal commodity grain. What are Heilongjiang's advantages in high-quality commodity grain, then? We feel that the key is the "two big and one small": rice, soybeans, and spring wheat.

We will discuss rice first. Heilongjiang's cold climate bestow on its farm products a fine-grain quality. The quality of rice is especially high. Not only is the quality of the rice superior to common paddy rice from the south, but it also includes the famous northern rice varieties, Xiaozhan Rice, Jingxi Rice, and others, that should receive the necessary attention. The poor quality of paddy rice in China over the past few years and the lack of sales outlets in international markets means that prices are at their lowest. In the Hong Kong market, for example, China's rice sales dropped from 60 percent of total imports in 1978 to 47 percent in 1983. The price per ton is \$340 for rice from Tahiland and \$500 per ton for Australian rice, but the price for Chinese rice is only \$320 to \$330 or 34 to 36 percent less than the price for Australian rice. Because of their natural conditions, however, neither Australian nor Thai rice can match Heilongjiang's superior rice. For this reason, if we use our high-quality rice to open up international markets, we could make better use of the Hong Kong, Japanese, and other markets and earn more foreign exchange for the state. We should establish a series of trade-industry-agriculture industrial systems for all links in breeding, cultivation, refining and processing, storage, packaging, and other areas. This would make greater contributions to the state and it would provide multiple benefits to local economic prosperity and people's income.

Not only is Heilongjiang rice of superior quality, but it also has high yields, so the potential for development is great. Heilongjiang had only 1,674,000 mu and total output of 410 million jin in 1949. These grew to 3,156,000 mu and 1.59 billion jin in 9180 and to 5.83 million mu and 2.82 billion jin in 1985, a sixfold increase over the period just after liberation.

Moreover, there is a large area of land in Heilongjiang Province that could be developed into paddy. According to scientific estimates, there are 4 million mu in the Sanjiang plain region alone. This gives Heilongjiang the concrete conditions for establishing a base area for high-quality paddy rice production.

We can look at soybeans next. China is famous throughout the world as the "Land of Soybeans." Heilongjiang is the home of soybeans in this "Land of Soybeans." The three northern provinces are China's main soybean-producing region. Soybean output in Heilongjiang was 3.15 billion jin in 1983, which was 51 present more than the combined output of Liaoning and Jilin. It can be said, therefore, that soybean cultivation is one of Heilongjiang Province's dominant industries.

Soybeans have both cash crop and grain crop components. Their economic and value and nutritional value are much greater than cereal grain crops.

One jin of soybeans is equivalent to the nutritional vlaue of 3.3 jin of wheat, 5.2 jin of paddy rice, or 4.9 jin of corn. The price of soybeans in current international markets is 3-fold greater than the price of wheat. There also are substantial opportunities in the soybeanprocessing industry. Every part of the soybean is valuable. Using modern processing techniques, each 100 jin of soybeans can provide 18 or 20 jin of soybean oil and 72 jin of crude protein. The crude protein can be turned into puffed protein and we also can derive pure soybean protein. There is more pure protein in 1 jin of pure soybean protein than in 5 jin of lean pork. Expanded protein mixed into sausage and ham has nutritive value as well as good taste. A processing plant handling 50 tons of soybeans a day requires only a few 100,000 yuan in additional investments and can make 400 yuan in profits per 100 jin by processing oil, expanded protein, and husks. Yearly profits in a processing plant that processes 15,000 tons of soybeans a year could reach 6 million yuan. It seemed in the past that there were no routes for development of township and town industries, but we can see now that there are many opportunities if we rely on our crop advantages. Soybeans definitely are the foundation for the formation of Heilongjiang's dominant secondary and tertiary industries.

Spring wheat is another dominant crop in Heilongjiang Province. The large cultivated area and fertile soil provide natural soil fertility of extreme natural richness and it also is located in the north, so there is a short frost-free season that is suited to the short growing time of spring wheat. We would use our advantages and avoid our disadvantages by developing spring wheat in Heilongjiang Province. According to technical economic data for all of China in 1979, the national average production cost per 100 jin of spring wheat was 13.75 yuan but was only 8.64 yuan in Heilongjiang, so inputs are 37.2 percent below the national average. If we examine levels of development, we see that Heilongjiang plants 31,444,000 mu of spring wheat with total output of 9.02 billion jin, about one-third of total grain output in Heilongjiang. Yields in Heilongjiang average 240 jin per mu, 54 percent higher than in Jilin. This obviously is a substantial advantage of a short frost-free season.

In summary, crop readjustments should be oriented toward Chinese and international markets and must form a foundation for the entire dominant industry system with a focus on key breakthroughs before any appreciable economic, social, or ecological results can be derived. employing a similar principle, we should work hard to develop our special advantages in cash crops, such as flax, beets, sunflowers, and so on, as the focus for readjustments in industrial structures.

III. Work for Protection and Comprehensive Utilization of Agricultural Resources on the Basis of a Need for Ecological Equilibrium

The development of ecological agriculture is an effective route for transforming traditional Chinese agriculture into modern agriculture,

and it also is an effective route for rural economic development and protection of the natural environment. Heilongjiang covers a vast area, 680 million mu, one-fourth of it cultivated land, one-half forests and one-fourth for animal husbandry, fishery, and other uses.

Comprehensive development of land resources is of major significance for agricultural development and achieving ecological equilibrium. We should develop economic diversification in rural areas based on the need for thick forests—rich grain—more animals, more fertilizer—more grain.

Heilongjiang has enormous forest resources, with more than 300 million mu of forests, 46 percent of its land area. This includes 240 million mu of forests with a forest vegetation coverage rate of 35.3 percent, which is more than twofold higher than the national average and first place among all provinces and autonomous regions. The major economic danger in forest regions at present is imbalanced cutting and raising. Forests have been seriously damaged through excessive cutting that has sharply reduced the forested area. The amount being cut is not only much larger than the amount being raised but also exceeds our capacity for out-shipment. A policy of reduced cutting should be strictly implemented in forest regions to assure the protection of forest resources and prevent overcutting. On this basis, forest regions should shift direction form a focus on cutting to one on afforestation and economic diversification. Forests with a chain-link pattern of administration and three-dimensional production should be built and attention given to development of diversified production under and in forests. We should achieve the integration of forests and agriculture, forests and animal husbandry, and forests and special products and strive to organize the production of special mountain and local products and valuable animals and plants to continually open up roads to prosperity.

Forest regions should turn their advantages in famous, special, and superior products into commodity economy advantages. An example is Shitouhezi Township in Shangzhi County, which has had a long history of cultivating the "three berries." The township set up a plant for processing fruit juice to deal with problems in shipping out large amounts of fruit when it begins to drop. The area planted in the "three berries" has expanded rapidly, from less than 1,000 mu in 1978 to nearly 10,000 mu at present. Output rose from 150 tons in 1980 to 1,000 tons in 1984. Per capita incomes in the village from sales of fruit alone were almost 100 yuan. Three Berry Liqueur also has become a famous fruit liqueur in China and in foreign countries. Another example is ginseng and the edible fungus Auricularia auricula-judae in Dongning County, watermelon seeds in Ning'an County, persimmion liqueur in Heihe City and so on, all of which have a good reputation in China and foreign countries. In summary, the guiding ideology in readjustments in industrial structures in forest areas is to shift our focus in commodity production to famous, special, and superior products, and to strive to develop economically diverse and multilayer processing to achieve multiple increases in value. Make use of the unique competitive abilities of local special products in commodity markets and improve ecological results as well as social and economic results. Achieve true conversion of unique and special mountain product advantages into commodity economy advantages.

Accelerated development of animal husbandry is one strategic focus of readjustments in industrial structures in rural areas. The Heilongjiang Provincial Government recently determined that 7 pastoral counties, 13 agropastoral counties and some additional agricultural counties have excellent conditions for developing animal husbandry. The development of animal husbandry should be focused on cattle, sheep, pigs, and poultry. Areas with abundant grasslands should focus on cattle and sheep. Agricultural regions should focus on pigs. Moreover, we should strengthen the feed industry and develop compound feeds and full-value feeds and achieve scientific raising. We should strive to develop plants for processing or dairy products, fur, feathers, and meat products to form a complete animal husbandry production system. Anda City, for example, has 2.6 million mu of grasslands and a long history of raising dairy cattle. It currently has 21,177 dairy cattle, the most in any of China's counties and equal to 9 percent of the total in Heilongjiang Province. There is one cow for every 15 rural residents. Total milk output was 35,000 tons in 1985, more than double the figure for 1978. This is 163 jin of milk per person. Anda has produced 13,000 tons of powdered milk and exported more than 2,000 cattle since 1980, and the foreign exchange earned for the state from these two items alone exceeds 29.1 million yuan. It will be possible for Heilongjiang to expand the number of dairy cattle to 2 million head by the year 2000. Moreover, there can be integration with soybean advantages to develop soy and dairy product industries and form a dominant industry.

Heilongjiang is rich in water resources, with more than 24 million mu of bodies of water of various types, but productivity is extremely low. We should make substantial reinforcements in aquacultural production and develop aquatic plants and animals to serve light industry and the people.

In summary, we must achieve a true integration of agriculture, forestry, animal husbandry, and fishery in accordance with the demands of ecological agriculture and use cultivated land, forests, pastoral areas, bodies of water, and buildings for agriculture to achieve full utilization of land resources within an area and convert as much solar energy as possible into bioenergy and provide larger amounts of farm and sideline products for society. We must implement a development strategy that integrates resource cultivation, economic development and environmental beautification.

IV. Establish "Resource Advantage" Township and Town Industry Systems

Township and town industries began developing rather late in Heilongjiang, and they have a weak foundation, few skilled personnel and capital, and equipment shortages. Our local industries cannot follow in the footsteps of advanced provinces, so we must establish a township and town industry system based on our own resource advantages.

The developmental situation in township and town industries throughout China can be divided into several major categories: One is capital advantages. Here, rural industries began rather early, so there is

abundant capital. Southern Jiangsu Province is a typical example. The second is technology advantages. These regions generally have fairly developed traditional rural technologies and can depend on enormous specialized markets to develop technical advantage-type township and town enterprises. Wenzhou Prefecture in Zhejiang Province is a representative example of these areas. The third is a resource advantage-type. Another model example is the large number of small coal pits in Shanxi Province's coal industry, which attract capital and labor and promote development in all types of industries in rural areas.

What should be the development strategy for Heilongjiang Province, then? We cannot follow the path of southern Jiangsu, nor can we borrow the example of Wenzhou. The only course is to develop resource advantage-type township and town industries. Examples include the industry for processing food products, the flaxen textile industry and fur and feather light industries that use farm product advantages as raw materials, and there also are various types of lumber product, forest chemistry, and other industries. Some areas have brought in skilled people, advanced technologies and advanced equipment to set up "resource advantage-type" township and town industry systems to improve the competitive abilities of products and transform resource advantages into comomdity economy advantages and promote coordinated development of agriculture, forestry, animal husbandry, sideline production and fishery as well as tertiary industries.

V. Develop Tertiary Industries Centered Around the Market Economy According to the Demand for Commodity Output

Commodities realize their value through exchange. The ability of a product to be sold is the key to whether or not it can become a commodity, which Marx has called a mortal leap. This in essence determines that tertiary industries focused on the development of commodity markets have an important status in readjustments in industrial structures, and it can be said that without markets, there could be no specialized dominant industries. One of the most basic reasons for local economic backwardness and inability to utilize advantages is that attention has not been given to development of a market economy centered on tertiary industries.

In developing tertiary industries, we should pay special attention to strengthening the construction of specialized commodity markets and be concerned with the formation of special small regional centers during development of the commodity economy. Practice has proven that it is quite common for horizontal economic relationships formed around a commodity economy core to become small regional centers. Relationships of exchange at equal value exist among all of the small regions, and they have relationships not only with nearby large cities but also extending into every corner of China or even the world. A specialized commodity market is the king of each specialized commodity center. Another example is the acrylic fiber textile market in Hebei Province's Lixian County. This county has the largest acrylic fiber textile market in China. It has more than

40,000 "specialized buying for resale households" which sell their products all over China. This county sold 20 million pieces of clothing and handled 5,000 tons of acrylic fiber in 1983, accounting for one-fourth of total sales in China and amounting to a gross value of output of 190 million yuan. The formation of this sort of specialized market played a decidedly motivational role in the development of this industry. Lixian County originally had five townships producing acrylic fiber clothing, but the figure has grown now to 21 townships, with 19,675 specialized households, more than 600 associations, and 28 specialized villages. This has caused these industries to grow quickly in size and move from Chinese to foreign markets. The number of personnel involved year round is 45,000 and the figure can reach 85,000 during the slack farming season. Some 40,000 visiting dealers pass through and form a specialized market. Each day, more than 6,000 people attend Beisong Market in Lixian County, including as many as 600 or more visiting dealers from other provinces and autonomous regions, and 100,000 articles of clothing are sold, with a commodity gross value of 400,000 yuan and daily exchanges of 250,000 yuan. There are processing relationships and business dealings with 56 woolen mills in 15 of China's provinces and even the Beijing Synthetic Fiber Plant had to come to this specialized rural market to find buyers for its overstocks of polyvinyl chloride fiber. It is obvious that there are broad prospects for such specialized markets and that this is a picture of a thriving commodity market.

To summarize, the rise of specialized township and village markets to form a core specialized small commodity center is a major characteristic of the development of a comomdity economy. These small specialized production and sales centers are the foundation for city and town development. We must unify planning work in the areas of commerce, services, posts and telecommunications, communications, construction of public facilities, labor services, culture and education, science, technology, and so on to assure the formation of small regional centers and accelerate the pace of rural urbanization.

12539/12624 CSO: 4007/483

HENAN

## VEGETABLE PRODUCTION DISCUSSED

Beijing ZHONGGUO SHANGYE BAO in Chinese 25 Mar 86 p 1

[Article: "Henan Province Vegetable Production Expands and Market Booms; Vegetable Gardens a Success, Baskets of Vegetables Abound"]

[Text] In the more than 1 year since restructuring the vegetable production and marketing system in Henan Province, vegetable output has expanded, the market is thriving, prices have stabilized, and the masses are pleased.

Henan carried out comprehensive restructuring of the vegetable production and marketing system in January 1985, changed from directive-style planning to guidance-style planning, price decontrol, let the vegetable farmers themselves decide which varieties to produce, and to put them on the market whenever and at whatever prices they saw fit. This motivated these farmers to produce more and output expanded quite rapidly. Acreage of vegetable fields increased throughout the year in 18 cities provincewide to 4,205 mu more than 1984 acreage, acreage maintained by the 8 cities under the jurisdiction of the provincial government expanded 110 percent; fine vegetable varieties increased more than 30 percent, and there was a preliminary change to a multilevel production setup where the nearby city suburbs are primary and the mid-distance suburbs and municipally administered counties are supplementary.

Due to expanded production, there has been an increase in the quantity and variety of vegetables on the market, quality has risen significantly, and old, coarse, dirty vegetables have been replaced by fresh, tender, delicate, clean ones; there has been a great increase in edibility, the gap between the peak and off seasons has been narrowed, and fresh vegetables are available daily. There were 20 to 30 varieties of fresh vegetables on the market in the spring of this year, with ample supplies of delicate greens not seen in recent years, such as crowndaisy chrysanthemums, Chinese artichokes, and blanched garlic leaves. Each city opened its gates to the peasants and encouarged them to come and sell their vegetables; circulation through multiple channels made for a booming market. Vegetable prices basically have stabilized; the retail price index provincewide for the year rose only 5.6 percent over the 1984 figure. Income increased for the vegetable growers; according to estimates in the Jinhai district of Zhengzhou City, 1985 per capita income was 420 yuan, which was an increase of 68 yuan over 1984 and

153 yuan over 1983. The cash return of state-operated vegetable companies increased and losses were reduced; provincewide losses in 1985 were more than 2.8 million yuan less than in 1984.

Major empirical observations from restructuring the vegetable production and marketing system in Henan include: 1. To conscientiously organize and bring about production through guidance-style planning, and to do a good job of setting up vegetable gardens, we need to ensure vegetable field acreage, to pay attention to properly managing the production of principal varieties, and to ensure adequate vegetable sources. 2. State-operated vegetable companies must open up operations, actively participate in market regulation, and play a leading role. We must enhance lateral ties, make accurate market forecasts, provide production services, undertake comprehensive operations focusing on vegetables, successfully regulate surpluses and shortages of varieties between peak and off seasons and between regions, and subsidize losses to realize the "four protections and one restraint" (protection against slack seasons, festivals, winter storage, and special requirements, and a restraint on vegetable prices). In order to successfully organize vegetable wholesale transactions and develop forward purchasing trade, 35 wholesale markets have been set up throughout the province, which have enlivened circulation. 3. We correctly applied the law of value, and based on the market situation following restructuring, limited and maintained purchase and sales prices of major varieties during off seasons and winter storage. Floating prices were applied to the state-operated vegetable wholesale market. Prices were freely determined in the agricultural trade markets by giving free play to the role of the market mechanism, which promoted expanded production. 4. The party and government leaders took the task seriously and offered careful guidance, which guaranteed that restructuring the vegetable production and marketing system would be carried out smoothly.

12513/12947 CSO: 4007/415

HUNAN

POLICY ON FERTILIZER PRICES IMPLEMENTED

Beijing ZHONGGUO SHANGYE BAO in Chinese 28 Jun 86 p 1

[Article: "Hunan Conscientiously Implements Policies To Subsidize Lower Prices for the Small-Scale Chemical Fertilizer Industry"]

[Text] After the State Council issued its notice concerning temporary measures to lower prices for the small-scale fertilizer industry, the Hunan Provincial People's Government earnestly implemented the policies and encouraged the peasants' enthusiasm in agriculture, industry and commerce, which has been effective in encouraging the development of agricultural production.

Beginning on 8 March 1986, the highest factory price in the small-scale fertilizer industry and the maximum retail price were set according to the State Council Notice. They studied problems related to subsidies for lower prices, exemption of product taxes for industry, and special policies for "old revolutionary base areas, minority nationality areas, frontier areas, and poor areas." The Hunan Provincial Government decided that financial administrations will provide producing enterprises a subsidy of 15 yuan per ton for ammonium carbon sold after 8 March 1986 that will be calculated monthly by local financial administrations. Because of the losses created by sales at lower prices, the Hunan Province financial administration will provide a subsidy of 10 million yuan to the Hunan Province Supply and Marketing Cooperative for stocks of ammonium carbon in supply and marketing cooperatives prior to the price decrease on 2 March 1986 and it will be distributed to the units under its jurisdiction through examination and approval by the Hunan Province supply and marketing cooperative system. Special policies will be implemented for nonnitrogenous fertilizer plants, counties where sales of ammonium carbon exceed output, and 42 counties in "old revolutionary base areas, minority nationality areas, frontier areas and poor areas." Besides the subsidy of 3.75 yuan per ton provided by Hunan Province financial administrations for each ton of ammonium carbon shipped into the counties, a certain regional price differential will be maintained for the 17 counties with higher original sales prices to encourage administrative initiative.

The implementation and honoring of these policies has greatly motivated enthusiasm in agriculture, industry, and commerce. Total industrial output in Hunan during April 1986 was 219,100 tons of ammonium carbon and 129,100 tons of phosphate fertilizer, up by 18 and 57 percent, respectively, over the monthly

plan. After prices for chemical fertilizer from small-scale plants were lowered, the peasants began actively buying fertilizer and made their purchases during a rather concentrated period of time and somewhat ahead of 1985. An example is Gaosha District in Dongkou County, where more than 1,000 peasants from this and neighboring districts lined up in front of raw materials stations to buy ammonium carbon on the first day after the new prices went into effect. Daily sales of ammonium carbon in the region increased from 15 tons to 150 tons. Sales of ammonium carbon in Changde Prefecture totaled 12,327 tons during March 1986, up 33.7 percent over the same period in 1985. A tendency toward monthly increases in ammonium carbon and phosphate fertilizer has appeared throughout Hunan Province. April sales were 489,000 tons of ammonium carbon and 325,000 tons of phosphate fertilizer, up 106 and 98 percent, respectively, over the same period in 1985. The policy of lower prices for the small-scale chemical fertilizer industry has been welcomed by the peasants.

12539/12379 CSO: 4007/474

SHAANXI

#### AGRICULTURE GETS INCREASED FUNDS

Xi'an SHAANXI RIBAO in Chinese 16 Jun 86 p 1

[Article: "A Substantial Increase in Financial Support for Agriculture in Shaanxi Province During 1986"]

[Text] Financial administration departments at all levels in Shaanxi Province have used all possible means to come up with funds to increase investments in agriculture. By the end of May 1986, estimated support for agriculture in Shaanxi reached 316.85 million yuan and the total amount of support for agriculture is up by 27.4 percent over the same period in 1985.

Investments to support agriculture in Shaanxi Province during 1986 have strengthened support for agricultural science and technology. Shaanxi Province financial administrations have provided additional capital for construction of agricultural technology extension networks to be used mainly for technical equipment for grassroots S&T networks, extension of agricultural S&T projects, training intellectual youth in rural areas and popularizing knowledge of agricultural science and technology.

In addition, another focus of capital support for agriculture during 1986 has been assistance for construction of agricultural base areas in Shaanxi. The province has spent 1.2 million yuan to construct apple base areas, double the amount in 1985. Moreover, special loans have been arranged for construction of commodity production base areas for Taichuan cattle, lean pork, freshwater fishery, and other products. Besides this, greater investments have been made in key grain-producing regions. Special capital allocations for grain production development arrangements in 48 primary grain-producing counties totaled 32 million yuan and are being used mainly to develop small-scale farmland water conservancy, extending improved varieties and agricultural S&T, strengthening plant protection and other projects.

12539/12379 CSO: 4007/474

SICHUAN

DEVELOPMENT OF FEED INDUSTRY MUST BE SPEEDED UP

Chengdu SICHUAN RIBAO in Chinese 6 Jul 86 p 2

[Article: "Speed Up Development of Sichuan's Feed Industry"]

[Text] Sichuan Province's feed industry has undergone substantial development over the past few years. This has played a major role in expanding the conversion of grain and promoting development of animal husbandry. However, growth in the feed industry comes far from meeting the needs of livestock raising. Pig inventories in Sichuan Province in 1985 exceeded 51 million, but there was less than 20 jin of compound and mixed feeds per pig. There are extreme feed shortages in many areas, especially pellet feeds, premixed feeds, concentrate feeds, and other superior feeds, and they often are unavailable for sale.

What new problems are facing the feed industry at present? One type can be found at the Mianyang Concentrated Feed Plant. This plant is a specialized factory operated jointly by Sichuan Province and Mianyang City that produces 20,000 tons of concentrated feeds each year. Because of prices, raw materials, and other factors, however, the factory cannot achieve the economic results that it should. Comrades in the Sichuan Province Feed Co said that such problems are common in Sichuan's feed industry. There has been a substantial price increase over the past few years for the raw materials used in feeds and product costs have risen. In another area, there is no planning for raw materials sources. Added to the rise in buying prices program due to competition by other provinces coming to Sichuan, the result is a serious shortage of raw materials. In addition, many processing enterprises lack auxillary production facilities, and there is especially a lack of full complements of facilities for warehouses, shipping tools, and so on, and capital shortages have restricted the development of production.

We should take action to explore ways to solve these problems. One method is to make an effort to develop horizontal integration and gradually form an integrated system for feeds, livestock raising, processing of animal products, and even food production to make full use of existing foundations in the feed industry and bring about a noticeable increase in results within a fairly short period of time. The Shuangliu County Feed Co now has established direct links with the Shengli Poultry Farm. The company provides the farm with ducklings and feed and the farm in turn signs poultry-raising and feed-supply contracts

with specialized raising households. The poultry farm now has eight specialized households that have contracted to raise 3,300 ducks. In addition, some feed processing plants have established direct integration with raising households or specialized households in rural areas.

The second line of action is to adhere to the spirit of relevant decisions and organize multiple channels for raw materials to transform the passive into the active. To solve the problems of shortages in raw materials, the Sichuan Provincial Government expressly stated during the first half of 1986 that the awards of grain for sales of fattened pigs should be changed to awards of mixed feeds. The state will allocate this grain to feed departments as raw material. All areas should adhere conscientiously to this policy and promote development of the feed industry. Feed departments should work actively to organize purchasing of raw materials. To avoid price rises due to competition from other provinces that come to Sichuan for raw materials, feed departments in Sichuan should unify purchasing prices and work to solve the problem of regional price differentials and price ratios to guarantee that the peasants will not suffer losses when they sell their grain. Patterns and methods employed in purchasing grain can involve exchanges for edible oils, flour, vegetable cakes, and other items, and they also can use negotiated prices for direct purchases.

The third line of action should be to provide policy support. The state has stipulated that newly constructed feed plants should be exempted from income taxes for the first 3 years and that their taxes would be reduced by half for the following 3 years. The Sichuan Provincial Government also has stipulated that for a period of 5 years prior to 1987, the feed industry should be provided with specific subsidies each year by local financial administrations to solve some of the insufficient fixed capital and circulating capital problems of enterprises. These policy measures await implementation to a further degree. Relevant departments should provide preferential supplies of raw materials, energy resources and other items to build favorable conditions for development of the feed industry in Sichuan Province.

12539/12379 CSO: 4007/474

XIZANG

#### GRAIN PRODUCTION EMPHASIZED

Lhasa XIZANG RIBAO in Chinese 3 Apr 86 p 2

[Article: "Further Emphasize Grain Production"]

[Text] As we got more involved in restructuring the rural economic structure in the autonomous region and further motivated the peasants to produce more, there was an accompanying expansion in agricultural production. Gross output of grain in 1985 topped 1 billion jin, and was the best harvest since 1980. Increasing grain output is a great undertaking: "when there is grain at hand, the mind is calm." A major accomplishment of rural reform in the region is that grain shortages have been eased, and it has provided the material base for expanding agricultural and livestock production for developing economic diversification, and for making a change toward modernization, commercialization, and specialization in agriculture. As such, we must seize upon this opportune time to emphasize grain production even more and to promote the transformation of the industrial structure in the rural pastoral areas.

We must realize, however, that under this favorable situation some comrades, and even individual leading comrades in some localities, pay less attention to grain production than was the case earlier, and have slackened their leadership. One reason is that they feel results come slowly in grain production, the cycle is long, and the return is low; there are quicker results in sideline production, income is greater, and the masses get rich more easily. They are inclined to "emphasize sideline production at the expense of agriculture," and not enough attention is paid to grain production. A second reason is that they feel grain production in the region is already about right, that there basically is enough to eat, and that difficulties would arise in striving for more. A third reason is that individual comrades have not come to realize that a definite potential crisis still exists with respect to grain production in the region.

The existence of these problems illustrates that some comrades have an inadequate understanding of the importance of paying special attention to grain production. Therefore, in order to bring about a continued steady rise in grain output in the region, we must resolve the following issues: First, we must increase our understanding and devote a great deal of attention to grain production. Agriculture is the foundation of the national economy, while grain is the foundation of that foundation. In addition to the fact that people must eat, industry needs agriculture to provide raw materials,

especially grain. In the countryside it is as we say, "no wealth without industry" and "no life without commerce," but this by no means implies that we can "emphasize industry at the expense of agriculture" or "abandon agriculture in favor of commerce," foremost, rather, is that "stability comes through agriculture." Nothing can be accomplished without grain. The purpose of restructuring the rural economic system is comprehensive development of the rural economy in a benign cycle. Under no circumstances should we open up new industrial or commercial zones in the rural areas; on the contrary, we should create large, advanced agricultural districts, employ advanced science and technology and industrialized methods, and produce large quantities of farm products. If the PRC depends on imports for most of its grain, and if our autonomous region relies on shipping in the larger part of the grain it needs, the foundations will be shaken; if we lose our support, there will be no question of setting up other enterprises. At a time now when the pattern of agriculture in the region is in the process of changing from a natural economy to a commercial economy and we are converting from traditional to modern agriculture, we must further correct the economic status of farming to guarantee its sustained, steady expansion. The agriculture we are speaking of here does not refer to grain production alone, rather, it means agriculture in general. Grain, however, is a major component of agriculture, and is a significant and irreplaceable product affecting the national economy and the standard of living. The reason we engage in sideline industry and develop a diversified economy is the relatively low return from grain production; income can be supplemented through developing economic diversification. Employing the necessary social regulatory measures to protect the economic interests of the grain farmers does not require them to abandon grain production; still less does their engaging in trade and sideline industry require reverting to "grain as the key link." On the contrary, it requires us to have a correct understanding of developing a diversified economy. In readjusting the production structure to handle correctly the relation between grain production and economic diversification, we cannot emphasize one at the expense of the other; we must reach the point where they help each other advance, a benigh cycle, and overall development is achieved. Under no circumstances may the leadership at any level lower its guard with respect to grain production, or relax its attention to grain as a result of last year's bumper harvest; nor may it neglect investment in agriculture simply because the grain production cycle is long and results are slow in coming, and even less may it shake the status of agriculture as foundation just because the proportion of income from economic diversification has increased. We must by every means possible motivate the peasants to produce grain, and as for the few districts where "sideline production is emphasized over agriculture," we must correctly readjust the industrial structure in accordance with specific conditions, concrete analysis, and overall planning. Provided there is absolutely no slacking off on grain production, we must capitalize on the strengths of a given locality, actively develop economic diversification, and strive for all-round expansion to make the peasants prosperous as quickly as possible.

Second, we must adopt realistic measures, and work hard for steady increases in grain output. There are quite a few natural conditions which restrict grain production in the autonomous region, so it cannot be said there are no

difficulties to increasing output. Does that mean, therefore, that we are at a loss? We feel that so long as we work hard to improve production conditions, and put more into the land, the potential is there to increase yields of grain per unit area, and it is possible to realize steady increases in grain output. Based on the reality of the autonomous region, major ways to improve conditions for production are to raise the productivity of the land and to pay special attention to capital construction of fields centering on water conservancy projects. We must further readjust the internal structure of the plant growing industry, expand acreage devoted to crops which nurture the soil, carry on crop rotation, and allow the land to lie fallow after cropping. We must make better use of sources of manure, accumulate large quantities of farmyard manure, increase the organic content of the soil, and foster soil fertility; at the same time, we must increase the use of chemical fertilizers, and apply them scientifically and rationally. We must put more into the land and educate the peasants; not only must we utilize the land, even more must we nurture it, put more into it, and in a determined manner eliminate operations which plunder the land. We must do things in accordance with both natural and economic law, create a benign cycle, coordinate development, and enable the land to provide us with more and more goods through time. We must further popularize and utilize advanced agricultural S&T. As a result of getting a late start in spreading the use of agricultural S&T in the region and having a substandard foundation, and since the peasants' educational level and capacity for intellectual investment are low, and due to the reality that traditional agriculture still is dominant, we must actively carry out reform of agricultural techniques step by step in a planned way, start with what is easy and work toward the more difficult, from lower levels to higher levels, from the simple to the complex, and gradually popularize their use. We can neither overstep reality nor bog down; we need more guidance, and more trials and demonstrations, so the masses can see and understand what is going on, and so we can gradually lead the masses to study science and apply it, which will facilitate establishing a new material and technological base for agriculture in the autonomous region.

Third, we must enhance leadership with respect to agricultural production. Strengthening leadership is the key to successfully engaging in grain production. The leadership at all levels, in this time of getting deeply involved in rural reform, must conscientiously unify our thinking with that of the central authorities as regards planning for work in the countryside, improve its ways, get deeply involved at the grassroots level, make inquiries and do research, break down its directions into small steps, and resolve problems. It must pay attention to actual conditions and be practical, not boastful. Though not slacking off on grain production in any way, it must stress the key elements, take the whole situation into account and plan accordingly, and guided by the policy of emphasizing livestock production, bring comprehensive development of agriculture, forestry, animal husbandry, sideline industry, and fishery to the autonomous region.

12513/12947 CSO: 4007/415

YUNNAN

## TECHNIQUES FOR PRODUCING ALTERNATE LIVESTOCK FEED LOCALLY

Kunming YUNNAN RIBAO in Chinese 22 Apr 86 p 3

[Article by Li Shuqing [2621 2885 3237] and Zhou Xuecao [6650 7185 2347] of the Provincial Livestock and Veterinary Institute: "Stress Feed Resource Development; Scientific Knowledge; Suggestions By Technicians"]

[Text] The grain shortage problem will accompany the entire process of Yunnan Province's modernization and livestock industry expansion. Agricultural districts have large populations, little cultivable land, and high land-use ratios. Further expansion of grain production is limited by land, water, energy, fertilizer, machinery, and other factors. Relying solely on grain and green fodder to expand the livestock industry is very problematic. Hence, a great effort must be made to reduce the grain-to-feed ratio, to develop the favorable conditions of agricultural districts, and fully utilize such byproducts as straw, chaff and peat, and other feeds processed from natural resources. This will make competition over land and fighting over feed unnecessary. Expanding the livestock industry by studying development of food resources in addition to food and commercial products is the path with the most vitality and competitiveness.

Straw and chaff are large masses of organic matter wherein solar energy is stored on earth. According to statistics, a year's energy is regularly stored on the earth in approximately 9.1 billion tons of dry plant matter. A 40-percent edible portion of it is in seed form, approximately 3.6 billion tons; a 60-percent inedible portion of it is primarily in straw, chaff, and other agricultural byproducts, approximately 5.5 billion tons. In addition, there is also a large quantity of wood waste products which is not included in these figures. China's annual straw production is 500 million tons, and Yunnan Province's annual production is nearly 30 billion jin. It is a huge annually renewable natural resource.

Peat is incompletely decomposed plant remains compressed under volcanic ash from 5 to 50 million years. Its principle components are cellulose, semicellulose, wood cellulose, coarse ash, coarse protein matter, and humic acid. Yunnan Province's peat reserves are rich, ranking fourth nationally. Dianchi, Yuxiu, Daba, Tengchong, and elsewhere have an average of over 5 million tons of reserves in peat mines, and the thickness of the mines are in excess of 10 meters. The thickness of the mines reaches 14 meters in

Puning and Kunyang. It is 18 meters at its deepest, a depth of peat mines seldom seen in the world. It is a huge underground resource for solar energy.

To expand Yunnan Province's feed industry, it is first necessary to expand the food resource industry, that is, to produce our own raw materials by using this province's natural resources. Currently, raw materials for Yunnan Province feed factories are mostly bought in from outside provinces and from abroad. For instance, fish meal is bought from Peru, Chile, Ecuador, and China's coastal provinces. Bean cake is bought from Manchuria, and corn and other raw materials are bought from Liaoning, Henan, and other provinces. Not only does this make for a large outflow of Yunnan Province's capital, the instability of raw materials often influences normal production and product quality. Because of this, development of Yunnan Province's own resources is to be a long-term plan.

Study for the utilization of broken down coarse cellulose and recovery of sugar and protein to raise the nutritional value of straw, peat, and so on for use as feed is a major field of study to expand basic natural resources, and is an important avenue for Yunnan Province to develop a source for large quantities of feed. Since 1973, our coordination group has undertaken many tests and much study, and have already successfully developed "hot sprayed feed." It is suitable for use in industrialized production. "Bacterial sugar feed" suits all farm village peasants for use in individual and collective production. Each 100 jin of straw or chaff can take 60 to 100 jin of food bacteria, or 70 jin of bacteria sugar. This invention has already been included in "The Road to Prosperity" [Zhi fu zhi lu] and other books, has also yielded positive results in several provinces, and reaped clear economic benefits. For a variety of reasons, Yunnan Province has not yet been able to expand its use. Attention should be paid to it, and it should be pushed.

13152/12947 CSO: 4007/409

YUNNAN

# INTEGRATING SCIENTIFIC RESEARCH WITH PRODUCTION DISCUSSED

Kunming YUNNAN RIBAO in Chinese 6 Apr 86 p 2

[Article: "Provincial Academy of Agricultural Sciences Persists in Integrating Scientific Research with Production, Obtains Excellent Results; Agricultural Technology Comprehensive Experimental Districts Open Up Production to Science and Technology"]

[Text] "Integrating the results of science and technology with production have made us aware of the benefits;" this is what the S&T personnel of the Yunnan Academy of Agricultural Sciences tell us. For many years now they have been in touch with the characteristics of the natural resources and agricultural production in the province, and they have devoted major efforts to researching the S&T problems associated with raising the yield, quality, and output value of grain and cash crops; they have set up comprehensive tobacco, sugarcane, and grain experimental and demonstration districts in 11 of the province's counties, which has created the positive experience necessary to direct agricultural production thorugh a reliance on science and technology.

The Yunnan Academy of Agricultural Sciences is the key scientific research organization in the province for the production of the major cash crops, grain, and oil crops. Under the policy that "science and technology must be geared to economic construction," they have proceeded from actual conditions in Yunnan, and proposed the "four focuses" and the "seven enhances" to guide scientific research in agriculture; namely, that it be geared to the mountainous regions, the mid- to low-producing regions, minority nationality regions, and arid regions; where both breeding and cultivation are equally important, enhance cultivation; as for grain and cash crops; as for mountainous regions and flatlands, enhance the mountainous regions; as for individual research and comprehensive research, enhance comprehensive research; as for paddy and dryland crops, enhance dryland crops; as for output and quality, enhance quality; and as for mid-production and pre- and post-production, enhance pre- and post-production. In accordance with these guidelines, they actively selected scientific research problems to tackle, got deeply involved in the first line of production, set up 11 comprehensive testing and demonstration districts, in Kunming, Yuxi, Chuxiong, Zhaotong, Luoping, Ludian, Jianshui, Kaiyuan, Mile, Ruili, and Luliang counties and prefectures, carried out comprehensive experiments on the major grain and cash crops, including

flue-cured tobacco, cane sugar, and grain, respectively, as well as on improving the red loam, and have realized results. For scientific research on sugarcane, a key reserach task set by the state--"cultivation techniques for high-yielding, high-sugar dryland sugarcane" -- they planted on an experimental basis 34,000 mu of land in Jianshui and Kaiyuan counties; after being checked and accepted by nationwide key task groups and specialists within and outside the province, they have realized the major technical and economic targets, and have achieved initial standardization of cultivation techniques. The expansive red-soiled Gushan Plain in Luliang, listed as a state key task project, was utilized as a comprehensive test district for improvement; it was a demonstration district where many units and many specialists acted in close coordination. After 5 years of major efforts, with flue-cured tobacco as the main crop, there was a yearly increase in income of 702,000 yuan, and a yearly increase in forestry income of 51,000-plus yuan. The yearly output value of agriculture, forestry, and animal husbandry in 1985 increased to 14 million yuan, up from 7.6 million yuan in 1980, which was a 90-percent increase. Through an interim summary inspection and appraisal last year, the popularizing of red soil improvement techniques over a large area brought a State Third-Class Award for Technical Advance. The Zhongxian [0022 4729] improved "Dian Rui [3329 3843] 408," successfully developed in the comprehensive demonstration district, has been listed as a current high-quality, high-yield, and more resistant new grain variety in the PRC with breakthrough potential.

The popularization and application of the results of scientific research in agriculture have created the conditions for the province's being more than self-sufficient in grain and oil crops, and for the large increase in cash crops. The unit area yield of paddy rice in the Menghai County comprehensive testing district in 1980 was only 409 jin, and required the state to ship in more than 8 million jin of grain per year; after 1981, paddy rice output increased yearly, and not only was the county more than self-sufficient in grain, by 1985 it was transferring to the state more than 97 million jin of commercial grain annually as well. Last year, the demonstration areas of the various classes of comprehensive testing districts totaled more than 2 million mu, of which 1 million-plus mu was paddy rice, which increased grain output in excess of 80 million jin, and increased the output value more than 12 million yuan. The other cash crops also brought fine economic return.

12513/12947 CSO: 4007/415

ZHEJIANG

# EXAMPLE OF NEW CONTRACT SYSTEM WORKING

OW301156 Beijing XINHUA in English 1108 GMT 30 Aug 86

[Text] Hangzhou, 30 August (XINHUA)—China has been implementing a new contract system in the past two years for state grain purchasing instead of the old mandatory buying.

State grain organizations negotiate contracts with farmers every year for the amount of grain they can supply to the state.

Zhejiang Province in east China has been a good example in the implementation of the new system, said Liu Ziyi, deputy chief of the provincial grain bureau. Last year it successfully met the 2.75 million-ton purchase quota for the year.

"The traditional mandatory system, though once effective, does not suit the growth of a rural commodity economy the government is now encouraging," Liu said.

State organizations set quotas for townships and villages. With the help of township grain stations, villagers' committees calculate the purchase amount for an individual farming household according to the size of its growing area. The amount of grain needed for the family to eat and that for seed and forage are deducted.

The farmer then suggests the amount he can supply for state purchase. After balancing within the village, the villagers' committees sign contracts with the township grain station on behalf of the farmers of the village.

After fulfilling the quota, farmers can sell surplus grain on free markets at higher prices than the contracted price. They can also sell to the state at the free market prices.

In case of natural disasters, the contracted amount of grain can be deducted or totally exempted.

Farmers who sign contracts have priority in applying for low-interest bank loans and buy fertilizer and diesel oil at preferential prices. Village and township industries also subsidize these farming households according to the quota they undertake.

The province purchased a total of 3.35 million tons of grain last year, 2.75 million tons at contracted prices and 600,000 tons at free market prices.

The new system has given incentives to farmers, said Liu. Last year the province harvested 16.2 million tons of grain, the same amount as in the year before but from a paddy field area of 6.9 percent less. It has cut back further on total paddy fields this year, said the grain bureau official, but will harvest more than last year, Liu predicted.

/12913 CSO: 4020/435

END